

LISTING OF CLAIMS:

1. (Currently Amended) A method of modeling an environment, comprising:
representing at least two entities in the environment, wherein each entity is represented with a component; [[and]]
representing an association between the at least two components with a relationship;
defining a hierarchy of the components and relationships; and
querying according to specific search criteria.
2. (Original) The method of claim 1, wherein each component is instantiated based on a component type.
3. (Original) The method of claim 2, wherein each component type is in a hierarchy of component types.
4. (Original) The method of claim 3, wherein each component type is a parent type or a subtype.
5. (Original) The method of claim 4, wherein the hierarchy of component types is tailored to the environment.
6. (Original) The method of claim 2, wherein each relationship is instantiated based on a relationship type.
7. (Original) The method of claim 6, wherein each relationship type is in a hierarchy of relationship types.
8. The method of claim 7, wherein each relationship type is a parent type or a subtype.
9. (Original) The method of claim 8, wherein the hierarchy of relationship types is tailored to the environment.
10. (Original) The method of claim 6, wherein each component is represented in a component table.

11. (Original) The method of claim 10, wherein each component type is represented in component type table.

12. (Original) The method of claim 11, wherein each relationship is represented in a relationship table.

13. (Original) The method of claim 12, wherein each relationship type is represented in relationship type table.

14. (Original) The method of claim 13, wherein the relationship table links each relationship to at least two components.

15. (Currently Amended) The method of claim 14, wherein the relationship table and the relationship type are distinct.

16. (Currently Amended) A system for modeling an environment, comprising:
a general purpose computer,
a software product, wherein the software product is on a computer readable
medium and is capable of instructing a general purpose computer to:
generate and save a set of components, wherein each component
represents an entity within the environment; [[and]]
generate and save a set of relationships, wherein each relationship
represents an association between at least two of the components
define a hierarchy of the set of components and the set of relationships;
and
query according to specific search criteria.
17. (Original) The system of claim 16, wherein each component is instantiated based on a component type.
18. (Original) The system of claim 17, wherein each component type is in a hierarchy of component types.
19. (Original) The system of claim 18, wherein each component type is a parent type or a subtype.
20. (Original) The system of claim 19, wherein the hierarchy of component types is tailored to the environment.
21. (Original) The system of claim 15, wherein each relationship is instantiated based on a relationship type.
22. (Original) The system of claim 21, wherein each relationship type is in a hierarchy of relationship types.
23. (Original) The system of claim 22, wherein each relationship type is a parent type or a subtype.

24. (Original) The system of claim 23, wherein the hierarchy of relationship types is tailored to the environment.

25. (Original) The system of claim 21, wherein each component is represented in a component table.

26. (Original) The system of claim 25, wherein each component type is represented in component type table.

27. (Original) The system of claim 26, wherein each relationship is represented in a relationship table.

28. (Original) The system of claim 27, wherein each relationship type is represented in relationship type table.

29. (Original) The system of claim 28, wherein the relationship table links each relationship to at least two components.

30. (Currently Amended) The system of claim 29, wherein the relationship table and the relationship type are distinct.

31. (Currently Amended) A software product capable of instructing a general purpose computer on a computer readable medium, wherein the software product comprises:

[[A computer readable medium having code for modeling an environment, wherein the code is embodied within computer readable medium, the code comprising instructions for:]]

[[representing]] an instruction to represent at least two entities in the environment, wherein each entity is represented with a component and the component is saved; [[and]]

[[representing]] an instruction to represent an association between the at least two components with a relationship;

an instruction to define a hierarchy of the components and relationships; and

an instruction to query according to specific search criteria.

32. (Currently Amended) [[The computer readable medium of]] The software product of claim 31, wherein each component is instantiated based on a component type.

33. (Currently Amended) [[The computer readable medium of]] The software product of claim 32, wherein each component type is in a hierarchy of component types.

34. (Currently Amended) [[The computer readable medium of]] The software product of claim 33, wherein each component type is a parent type or a subtype.

35. (Currently Amended) [[The computer readable medium of]] The software product of claim 34, wherein the hierarchy of component types is tailored to the environment.

36. (Currently Amended) [[The computer readable medium of]] The software product of claim 32, wherein each relationship is instantiated based on a relationship type.

37. (Currently Amended) [[The computer readable medium of]] The software product of claim 36, wherein each relationship type is in a hierarchy of relationship types.

38. (Currently Amended) [[The computer readable medium of]] The software product of claim 37, wherein each relationship type is a parent type or a subtype.

39. (Currently Amended) [[The computer readable medium of]] The software product of claim 38, wherein the hierarchy of relationship types is tailored to the environment.

40. (Currently Amended) ~~[[The computer readable medium of]]~~ The software product of claim 6, wherein each component is represented in a component table.

41. (Currently Amended) ~~[[The computer readable medium of]]~~ The software product of claim 40, wherein each component type is represented in component type table.

42. (Currently Amended) ~~[[The computer readable medium of]]~~ The software product of claim 41, wherein each relationship is represented in a relationship table.

43. (Currently Amended) ~~[[The computer readable medium of]]~~ The software product of claim 42, wherein each relationship type is represented in relationship type table.

44. (Currently Amended) ~~[[The computer readable medium of]]~~ The software product claim 43, wherein the relationship table links each relationship to at least two components.

45. (Currently Amended) ~~[[The computer readable medium of]]~~ The software product of claim 44, wherein the relationship table and the relationship ~~[[table]]~~ type are distinct.

46. (New) The method of claim 1, further comprising, utilizing a typing system to define the hierarchy of components and relationships.

47. (New) The method of claim 46, wherein the typing system further includes a generic model structure to define a hierarchy of components and relationships.

48. (New) The method of claim 47, wherein a data structure is associated with the generic data model.

49. (New) The method of claim 48, wherein the data structure is associated with the generic data model is stored utilizing a table schema.

50. (New) The method of claim 49, wherein the table schema does not change with an addition of a new data structure or types of data structures.

51. (New) The method of claim 1, wherein each of the relationships or components has a type, wherein the type is a category of the relationships or components and wherein the relationships or components type has the same properties.

52. (New) The method of claim 51, wherein the relationships or components has different values for the same properties associated with the type.

53. (New) The method of claim 52, wherein the relationship or component type further includes a subtype, wherein the subtype inherits all the properties of the relationship or component type.